# Prediction Markets

<table>
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<tr>
<th>Candidate Rank</th>
<th>Bush</th>
<th>Trump</th>
<th>Rubio</th>
<th>Walker</th>
<th>Kasich</th>
<th>Cruz</th>
<th>Carson</th>
<th>Paul</th>
<th>Christie</th>
<th>Huckabee</th>
<th>Fiorina</th>
<th>Santorum</th>
<th>Perry</th>
<th>Jindal</th>
<th>Graham</th>
<th>Pataki</th>
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<tbody>
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Better forecasts through incentives...
Network Games

How does your position in your social network affect...?

● What products you adopt
● How you vote
Security Games

How can authorities optimize limited resources to defend against potential terrorist attacks?
Ad Auctions

Search ads are sold by instantaneous auctions.

- What are the right rules for the auction?
- How should advertisers bid?
Computing Equilibria

Solving poker

Finding Nash equilibria is believed to be NP-intermediate (PPAD-completeness).

Worst-case-exponential may not be so bad.
Agent-Based Modeling

We can use simulation to study systems that are too complex for mathematical modeling.

How harmful is high-frequency trading?  
When are decentralized currencies viable?